DOCUMENT RESUME

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SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
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DESCRIPTORS	*Abstracts; *Annotated Bibliographies; *Drug Therapy; *Exceptional Child Research; *Handicapped Children; Sedatives
IDENTIFIERS	Megavitamin Therapy; Orthomolecular Therapy

ABSTRACT

The selected bibliography on drug therapy contains approximately 46 abstracts with indexing information explained to be drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings, as of August, 1972. Abstracts are said to be chosen using the criteria of availability of document to user, currency, information value, author's reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included which identifies the different parts of the abstract), how to use the author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (an order blank is provided), an order blank for Exceptional Child Education Abstracts in which the abstracts are originally published, a list of indexing terms searched to compile the bibliography, and a list of journals from which articles are abstracted for the bibliography. Publication date of documents abstracted ranges from 1965 to 1971. (CB)

ED 069064

DRUG THERAPY

A Selective Bibliography

August, 1972

CEC Information Center on Exceptional Children
An ERIC Clearinghouse
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1411 S. Jefferson Davis Highway
Arlington, Virginia 22202

EC 050 139E

Exceptional Child Bibliography Series No. 602

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The CEC Information Center on Exceptional Children

With a grant from the US Office of Education, the CEC Information Center was established at The Council for Exceptional Children to serve as a comprehensive source of information on research, instructional materials, programs, administration, teacher education, methods, curriculum, etc. for the field of special education. The Center functions as the Clearinghouse on Exceptional Children in the Educational Resources Information Centers (ERIC) program and also as a member center in the Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

How to Use This Bibliography

The *Exceptional Child Bibliography Series* was initiated by the CEC Information Center to answer the need for rapid responses to specific requests for information. The volume of information requests received by the Center is analyzed and used as a guide in preparing special topic bibliographies in the field of exceptional child education. Abstracts contained in the bibliographies are drawn from the computer file of abstracts which represents the CEC Information Center's complete holdings as of the date indicated on each bibliography.

Selective editing by Information Specialists is performed on each bibliography. From the total number of abstracts drawn from the file on a particular topic, selection is made of only those judged to best meet the following criteria: availability of the document to the user, currency, information value, author's reputation, and classical content. The number of abstracts selected to appear in a bibliography may vary from one to 100, depending on the amount of suitable information available. Updating of bibliographies as new material becomes available is accomplished when the volume of new material reaches 25 percent of presently available material on a given topic.

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Each abstract contains three sections–bibliographic data, descriptors, and a summary of the document. The bibliographic section provides the document's identifying number (ED and/or EC), publication date, author, title, source, and availability. The descriptors indicate the subjects with which a document deals. The summary provides a comprehensive overview of the document's contents and in some cases document availability is announced here.

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Some bibliographies in *Exceptional Children Bibliography Series* contain author and/or subject indexes. In these bibliographies, readers seeking work on a specific aspect of the general topic may consult the subject index to be referred to specific abstract numbers. Abstracts dealing with several topics may be identified by finding the same abstract number under two or more subjects in the subject index.

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Documents with an ED number and EDRS availability indicated may be purchased from the ERIC Document Reproduction Service (EDRS). For your convenience an order form is provided on the back cover of this bibliography.

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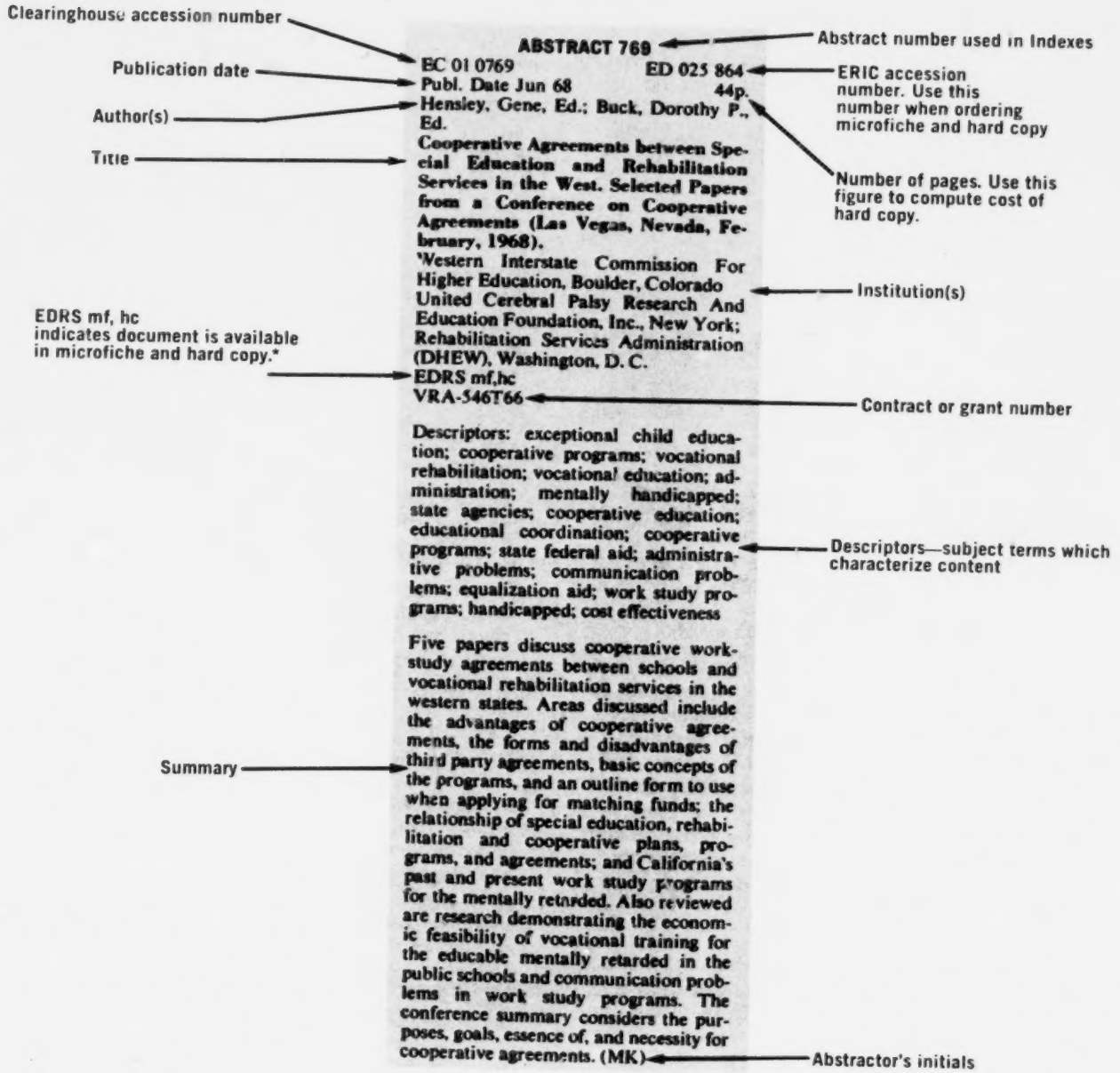
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ABSTRACT 769
Abstract number used in Indexes
Publication date
EC 01 0769
ED 025 864
ERIC accession number. Use this number when ordering microfiche and hard copy
Publ. Date Jun 68
44p.
Author(s)
Hensley, Gene, Ed.; Buck, Dorothy P., Ed.
Title
Cooperative Agreements between Special Education and Rehabilitation Services in the West. Selected Papers from a Conference on Cooperative Agreements (Las Vegas, Nevada, February, 1968).
Number of pages. Use this figure to compute cost of hard copy.
Western Interstate Commission For Higher Education, Boulder, Colorado
United Cerebral Palsy Research And Education Foundation, Inc., New York; Rehabilitation Services Administration (DHEW), Washington, D. C.
Institution(s)
EDRS mf, hc
indicates document is available in microfiche and hard copy.*
EDRS mf,hc
VRA-546T66
Contract or grant number
Descriptors: exceptional child education; cooperative programs; vocational rehabilitation; vocational education; administration; mentally handicapped; state agencies; cooperative education; educational coordination; cooperative programs; state federal aid; administrative problems; communication problems; equalization aid; work study programs; handicapped; cost effectiveness
Descriptors—subject terms which characterize content
Five papers discuss cooperative work-study agreements between schools and vocational rehabilitation services in the western states. Areas discussed include the advantages of cooperative agreements, the forms and disadvantages of third party agreements, basic concepts of the programs, and an outline form to use when applying for matching funds; the relationship of special education, rehabilitation and cooperative plans, programs, and agreements; and California's past and present work study programs for the mentally retarded. Also reviewed are research demonstrating the economic feasibility of vocational training for the educable mentally retarded in the public schools and communication problems in work study programs. The conference summary considers the purposes, goals, essence of, and necessity for cooperative agreements. (MK)
Summary
Abstractor's initials

*NOTE: EDRS mf indicates microfiche reproduction only.

INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Drug Therapy* from the Center's computer file of abstracts are listed alphabetically below:

Drug Therapy
Megavitamin Therapy
Orthomolecular Therapy
Sedatives

JOURNALS USED

Abstracts of articles from the following periodicals appear in this bibliography:

Academic Therapy Quarterly
American Journal of Orthopsychiatry
Annual Review of Psychology
Children's House
Education of the Visually Handicapped
Educational Horizons
Inequality in Education
International Journal of Neuropsychiatry
Journal of Auditory Research
Journal of Autism and Childhood Schizophrenia
Journal of Child Psychology and Psychiatry
Journal of Education
Journal of Learning Disabilities
Journal of Nervous and Mental Disease
Journal of Speech and Hearing Research
Journal of the Association for the Study of Perception
Pediatrics
Rehabilitation Literature
Saturday Review
Schizophrenia
Science

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts,* Volumes I-III.

ABSTRACTS

ABSTRACT 10753

EC 01 0753 ED N.A.
Publ. Date 67 6p.
Creager, Ray O.; Van Riper, Catharine
The Effect of Methylphenidate on the Verbal Productivity of Children with Cerebral Dysfunction.
Kalamazoo Child Guidance Clinic, Mighigan
EDRS not available
Journal Of Speech And Hearing Research; V10 P623-8 1967

Descriptors: exceptional child research; neurologically handicapped; behavior; behavior change; verbal communication; expressive language; retarded speech development; medical treatment; research reviews (publications); elementary school students; pictorial stimuli; communication problems; language handicapped; language ability; drug therapy; Methylphenidate; Ritalin

Methylphenidate (Ritalin), a drug which stimulates the sensory cortex of the brain and frequently results in varied behavioral improvements, was administered to 30 subjects from 8 to 10 years of age with average intelligence and cerebral dysfunction. Each child was recorded in communication with the experimenter before medication, after 3 days of medication with methylphenidate, and after 3 days of placebo treatment (the experimenter was not aware of the order of drug administration). Verbal responses to five pictures from the Michigan Picture Test and two general questions were analyzed. Children under methylphenidate medication showed increased speech productivity over their performance under other conditions on measures of total words spoken, number of responses, and number of incomplete utterances (p equals .01). No significant difference was found for mean response length, longest responses, one word responses, or sentences without phrases. Conclusions were that speech production was increased although more effective expression of more complex ideas was not established. (JM)

ABSTRACT 10918

EC 01 0918 ED 026 761
Publ. Date 65 79p.
Robb, Preston
Epilepsy; A Review of Basic and Clinical Research. NINDB Monograph Number 1.
National Institute Of Neurological Diseases And Blindness (DHEW), Washington, D. C.
EDRS mf
PHS-PUB-1357
Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($0.45).

Descriptors: exceptional child research; special health problems; epilepsy; neurologically handicapped; incidence; etiology; genetics; infectious diseases; biochemistry; seizures; classification; clinical diagnosis; pathology; medical treatment; research reviews (publications); medical research

A discussion of the incidence of epilepsy is followed by a discussion of etiology including the following causes: genetic and birth factors, infectious diseases, toxic factors, trauma or physical agents, heredofamilial and degenerative disorders, circulatory disturbances, metabolic and nutritional disturbances, and neoplasms. Epileptic seizures are classified by symptoms, duration, precipitating factors, postictal phenomena, behavioral disorders associated with epilepsy, and related paroxysmal disorders; patterns of attack are described. Diagnosis and pathology are considered along with treatment by anticonvulsant drugs (available drugs are listed), dietary and surgical treatment, indications and results of surgery, and prognosis. References follow each chapter. (JM)

ABSTRACT 11012

EC 01 1012 ED N.A.
Publ. Date 66 14p.
Baldwin, Ruth W.; Kenney, Thomas J.
Medical Treatment of Behavior Disorders.
Maryland University, Baltimore, School Of Medicine
EDRS not available

Special Child Publications, Seattle Seguin School, Inc., 71 Columbia Street, Seattle, Washington 98104.
Chapter In Learning Disorders, Volume 2, Pages 313-27.

Descriptors: exceptional child research; learning disabilities; behavior; medical treatment; minimally brain injured; seizures; behavior rating scales; behavior problems; followup studies; physicians; behavior change

After an historical overview of the use of various medicines such as stimulants, antihistamines, anticonvulsants, and tranquilizers in the treatment of minimal brain damage, medication response in 100 children and adolescents was studied during a 3-month followup period. Sixty-one had minimal brain damage with behavior disturbances while 39 also had seizures. Twenty medications were used individually and in various combinations, eight to a sufficient degree to be considered. The composite behavior rating of each child on a 5-point scale included the physician's followup impression, parent's reports, and in some cases, the school official's report. No one medication was found satisfactory for all categories, but various ones were generally effective. Diphenhydramine hydrochloride (Bendaryl (R)) was significantly effective with the total group (p equals .002 for 30 cases) while sodium diphenylhydantoin (Dilantin (R)) and phenobarbital were effective for those with seizures in addition to behavior disorders (p equals .002 and p equals .001 respectively). The most effective combination was sodium diphenylhydantoin and diphenhydramine, used in 16 cases. (DF)

ABSTRACT 11547

EC 01 1547 ED 029 448
Publ. Date 31 Dec 68 93p.
Zedler, Empress Y.
Educational Programming for Pupils with Neurologically Based Language Disorders. Final Report.
Southwest Texas State College, San Marcos, School Of Education
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-5-10-001
BR-5-1062

Descriptors: exceptional child research; learning disabilities; drug therapy; regular class placement; academic achievement; special classes; individualized instruction; after school tutoring; language handicapped; minimally brain injured; language instruction; basic skills; intelligence differences; learning characteristics; student evaluation; comparative analysis; underachievers

To investigate procedures whereby schools may achieve maximal results with otherwise normal underachieving pupils with neurologically based language-learning disorders, 100 such subjects were studied over a 2-year period. Fifty experimental subjects remained in regular classes in school and received individualized teaching outside of school hours from specially trained clinicians. Fifty matched control subjects were enrolled in special education classes and did not receive clinical teaching after school. Half of the experimental and half of the control subjects had anticonvulsive medication prescribed by their physicians; the others did not. Tests of academic achievement and mental functioning indicated that the

experimental groups made significantly greater gains in both variables than did the control. However, the medicated groups did not make greater gains than the unmedicated. (Author)

ABSTRACT 11832

EC 01 1832 ED N.A.
Publ. Date 20 Jan 68 4p.
Krech, David
The Chemistry of Learning.
EDRS not available
Saturday Review; P48-50, 68 20 Jan 1968

Descriptors: exceptional child research; animal research; environmental influences; learning processes; cognitive processes; retention; laboratory experiments; biochemistry; memory; drug therapy; rats

Performed with rats and goldfish, the experiments reviewed were concerned with the disruption or prevention of the formation of memory, with the injection of central nervous system stimulants, and with the effects of enriched as opposed to deprived environments on structure and chemistry of the brain. Findings were as follow: interruption of the short-term memory process right after an experience prevented development of a long-term memory for that experience; drugs facilitated learning and memory, but different drugs worked differently for different subjects, different tasks, and different learning components; and the enriched environment produced the expected changes in brain anatomy and brain chemistry. It was suggested that in the future, education of children may require the combined skills of the educator and the biochemist. (MM)

ABSTRACT 20415

EC 02 0415 ED N.A.
Publ. Date 19 Apr 68 7p.
Pauling, Linus
Orthomolecular Psychiatry.

EDRS not available
Science; V160 N4 P265-71 Apr 1968

Descriptors: exceptional child research; emotionally disturbed; medical research; medical treatment; drug therapy; mental illness; nutrition; genetics; biochemistry; schizophrenia; physiology; research reviews (publications); etiology

Orthomolecular therapy, or the provision of a person with optimum concentrations of important normal constituents of the brain as treatment for mental illness, is supported by research reports involving biochemical and genetic arguments. The brain is discussed as sensitive to changes in concentrations of vital substances and as affected by physiological abnormalities. The possible effects of decreased permeability of blood brain barrier for the vital substances or increased rate of metabolism of the substances in the brain are described. It is suggested that the genes responsible for abnormalities in the concentration of vital substances in the brain may also be responsible for increased penetrance of the postulated gene for schizophrenias and that by varying the concentrations of substances normally present in the human body, control of mental disease may be possible. (LE)

ABSTRACT 20504

EC 02 0504 ED N.A.
Publ. Date (67) 37p.
Baldwin, Ruth And Others
The Doctor Looks at the NH Child; Diagnosis and Treatment.
Ontario Association For Children With Learning Disabilities, Toronto
EDRS not available
Ontario Association For Children With Learning Disabilities, 306 Warren Road, Toronto 7, Ontario.

Descriptors: exceptional child research; learning disabilities; behavior problems; achievement; neurologically handicapped; minimally brain injured; hyperactivity; drug therapy; mental health; teacher responsibility; psychological patterns; clinical diagnosis; medical treatment; behavior patterns; sedatives

An article on the treatment of behavior disorders with medication concerns the effectiveness of various drugs in controlling the behavior disorders of 100 minimally brain injured children and includes reviews of related literature. Examination of medication response in relation to electroencephalographic patterns revealed no significant findings but some useful trends were noted with several drugs. A discussion of diagnosis and treatment of hyperactivity focuses on hyperactivity, etiology, medication, and therapeutic regimen and indicates that the judicious use of drugs may produce dramatic improvement in behavior. Information on school achievement, learning difficulties, and mental health suggests that the pressure on children to achieve in their schoolwork should be examined in relation to their mental and physical health. It is suggested that teachers can recognize unhealthy behavior patterns and promote healthy behaviors. The pressure of many parents for achievement at school illustrates the need for more teacher-parent communication regarding the school's aims and methods, particularly in view of the increasing appreciation of the individual differences in children; case illustrations are included. (LE)

ABSTRACT 20769

EC 02 0769 ED N.A.
Publ. Date Sum 69 9p.
Knights, Robert M.; Hinton, George G.
Minimal Brain Dysfunction: Clinical and Psychological Test Characteristics.
EDRS not available
Academic Therapy Quarterly; V4 N4 P265-73 Sum 1969

Descriptors: exceptional child research; minimally brain injured; test results; diagnostic tests; test interpretation; language handicaps; learning disabilities; drug therapy; individual characteristics

Fifty children referred to a pediatric neurologist and diagnosed as having minimal brain dysfunction (MBD) were followed for 3 or more years. The 44 boys and six girls had a mean age of 10.6 years and a mean IQ of 105 (range from 80 to 137). Chief complaints were school problems (31 children), behavior problems (13 children), seizures (3 children), and poor coordination (3 children). The most common deficit was language, as measured by an aphasia screening test. The neurologist divided the children into 3 groups: 14 children showed developmental lag, 11 were hyperkinetic, and 25 had MBD. All were treated by consultation with the parents, discussion with the teacher, medication, and explanation to the child. Results were about the same in each group with 1/3 making normal progress, 1/3 needing some help and 1/3 failing in school. Factors correlating with eventual school success were higher IQ, economic advantage of the family, and city living. Forty of the children participated in a study of methylphenidate (Ritalin). After 6 weeks there was a statistically significant improvement in the drug group over the placebo control group on the WISC Performance IQ, a significant improvement in motor coordination on two tests of tremor, and significant improvement in behavior as rated by parents and teachers. Examples of test profiles are included. (LE)

ABSTRACT 21170

EC 02 1170 ED N.A.
Publ. Date 70 34p.
Kumar, R. And Others
Psychopharmacology.
EDRS not available
Annual Review Of Psychology; V21 P595-628 1970

Descriptors: medical research; drug therapy; research reviews (publications); hunger; fear; learning; medical treatment; behavior; memory; reinforcers

Research studies in psychopharmacology examine the areas of hunger and thirst effects, fear, exploratory behavior, drug use as a reinforcer, pretrial and posttrial administration of drugs as an influence on learning and memory, and testing of new drugs. (RD)

ABSTRACT 21177

EC 02 1177 ED N.A.
Publ. Date Dec 69 9p.
Roeske, Nancy A.
Improving Blind Children's Scholastic and Social Performance with Medication.
EDRS not available
Education Of The Visually Handicapped; V1 N4 P105-13 Dec 1969

Descriptors: exceptional child research; visually handicapped; emotionally disturbed; drug therapy; medical treatment; academic achievement; institutionalized (persons); blind; socialization; behavior change; Mellarie

To help meet the needs of institutionalized blind children who present serious learning and behavior problems, Mellarie was administered to 28 children to evaluate the effects on behavior. Behavior reports from houseparents and academic reports from teachers were formed prior to the onset of the study and during the 4 weeks on drug therapy, the 4 weeks off medication, and during the reinstatement of medication for 4 weeks. Interviews with the child and the ratings by the nurse, houseparent, teachers and psychiatrist were collected and are reported through tables and through their conversational comments showing the benefits of Mellarie treatment. Sixteen of the children showed significant improvement; children with behavioral disorders showed the most marked gain both academically and socially. Neurotic and passive aggressive children did not improve on medication, and the blindisms of the fourteen totally blind children ceased while they were on medication. A regression in all areas was noted when the medication was discontinued. When Mellarie was beneficial, the anecdotal comments of both child and teacher showed that a substantial reduction of tense and anxious feeling facilitated academic and social growth. (WW)

ABSTRACT 23100

EC 02 3100 ED N.A.
Publ. Date Apr 69 27p.
Beavers, Dorothy J.
The Challenging Frontier: Environmental, Genetic, Biochemical and Neurological Factors in Severe Mental Illness.
EDRS not available
Schizophrenia; V1 N4 P206-32 Apr 1969

Descriptors: mental illness; heredity; genetics; biochemistry; neurology; environmental influences; drug therapy; medical treatment; autism; schizophrenia; emotionally disturbed; research needs

The essay discusses the importance of heredity in mental illness, citing evidence to refute the belief that environment is the causative factor. It is concluded that mental illness is caused by one or several genetically controlled metabolic, enzymatic, neurological, or biochemical defects, which create chemical imbalances or neurological imperfections in the central nervous system and brain. However, it is admitted that a stressful environment can aggravate a mental condition in individuals made susceptible through genetic inheritance (the body does synthesize abnormal kinds and amounts of chemicals under stress, which can build up in the brain and cause mental disorders). Psychotherapy is suggested as an aid only for patients who are still capable of communicating with the analyst. But, especially in severe mental illness, cures by chemotherapy or surgery are foreseen. A shift in research from psychological to biochemical, neurological, and genetic studies is advocated. Until cures for severe mental illness can be found, provision of educational experiences is urged (through educational and behavioral techniques such as operant conditioning). (KW)

ABSTRACT 23154

EC 02 3154 ED N.A.
Publ. Date 70 11p.
Hoffer, A.
Childhood Schizophrenia: A Case Treated with Nicotinic Acid and Nicotinamide.
Saskatchewan Department Of Public Health, Canada, Psychiatric Services Branch
EDRS not available
Schizophrenia; V2 N1 P43-53 Jan 1970

Descriptors: exceptional child research; schizophrenia; case studies (education); medical treatment; medical case histories

Reported is a case history of a child treated from age nine to age 17 with nicotinic acid and later nicotinamide. Included are results of testing and periodic progress reports. (MS)

ABSTRACT 23296

EC 02 3296 ED N.A.
Publ. Date May 70 16p.
Bergen, John R.
Plasma Factors, Amines and Their Derivatives in Schizophrenia.
Worcester Foundation For Experimental Biology, Shrewsbury, Massachusetts
Ittleson Family Foundation;
Scottish Rite Committee For Research In Schizophrenia
EDRS not available
MH-02967
Research Communications In Chemical Pathology And Pharmacology; V1 N3 P403-418 May 1970

Descriptors: mental illness; schizophrenia; biochemistry; medical research; drug therapy; biological influences

Presented is an area of biochemical investigation of schizophrenia aimed at establishing a basis for a rational chemotherapy for schizophrenia. Research concerning the isolation from the blood plasma of specific proteins thought to be different in schizophrenia patients is featured. Described are the characteristics of an a-2 globulin isolated from the plasma of schizophrenic patients, and a small molecule (which perhaps belongs to the substituted phenylethylamine series) which seems to be attached to the a-2 globulin. Also discussed are experiments with dimethoxyphenylethylamine (DMPEA), a compound reported to be excreted by some schizophrenics, and the relationship of other biologically active amines to mental illness. (KW)

ABSTRACT 23319

EC 02 3319 ED N.A.
Publ. Date Jul 70 14p.
Sprague, Robert L. And Others
Methylphenidate and Thioridazine: Learning, Reaction Time, Activity, and Classroom Behavior in Disturbed Children.
EDRS not available
American Journal Of Orthopsychiatry; V40 N4 P615-28 Jul 1970

Descriptors: exceptional child research; emotionally disturbed; drug therapy; learning processes; reaction time; hyperactivity; behavior change

Twelve emotionally disturbed underachieving boys in special education class served as their own controls in a three-factor study: drug (methylphenidate, thioridazine and placebo), dosage (low and high), and number of stimuli displayed. Methylphenidate significantly increased correct responding, decreased reaction times and hyperactivity, and significantly increased attention and cooperative behavior in the classroom. (Author)

ABSTRACT 30261

EC 03 0261 ED N.A.
Publ. Date 70 8p.
Gross, Mortimer D.
Some Medical Aspects of Learning Disabilities.
EDRS not available
Journal Of The Association For The Study Of Perception; V5 N1 P1-8 Spr 1970

Descriptors: exceptional child education; learning disabilities; neurological defects; neurological organization; drug therapy; physiology; behavior problems; medical treatment

Discussed is the background of the field of learning disabilities, beginning with a major revolution in psychiatry after 1955. Learning disability as a term is defined, and brain dysfunction differentiated from brain damage. The chemical and physiological working of the brain is described in relatively simple terms, using comparisons with computer operation and computer storage and retrieval of information. Also considered is the relationship of learning disabilities and behavioral problems, the management of children with such problems, and major kinds of medications used to help such children. The combination of medication and special education is recommended as an ideal combination for providing the optimum conditions for learning. (KW)

ABSTRACT 30518

EC 03 0518 ED N.A.
Publ. Date 70 117p.
Levy, Marvin R. And Others
Resource Book for Drug Abuse Education.
American Association For Health, Physical Education, And Recreation, Washington, D. C.
EDRS not available
American Association For Health, Physical Education, And Recreation, 1201 Sixteenth Street, Washington, D. C. 20036 ($1.25).

Descriptors: drug abuse; health education; teaching methods; marihuana; lysergic acid diethylamide; narcotics; drug therapy; drug legislation; prevention; films; values; drug addiction; motivation

Designed to enable teachers to use materials about drugs skillfully, this book contains papers by a number of authors. Included are papers on techniques of education about drugs and papers presenting factual information about drugs. A range of views are provided. Also presented are an annotated listing of films on drug abuse, detailed instructions on planning a drug abuse education workshop, and an annotated list of references. (MS)

ABSTRACT 30717

EC 03 0717 ED N.A.
Publ. Date 70 8p.
Jacobson, Jean
Drug Abuse and Learning Effects.
EDRS not available
Educational Horizons; V48 N4 P97-104 Sum 1970

Descriptors: drug abuse; drug addiction; lysergic acid diethylamide; narcotics; sedatives; alcoholism; health education; prevention

The effects of various drugs on the user and his learning ability are described. Categories of drugs discussed are narcotics, stimulants (amphetamines), sedatives (barbiturates), hallucinogens (LSD, marijuana, and others), volatile chemicals (airplane glue, paint, and others), and alcohol. Aspects of successful preventive drug abuse education are considered. (MS)

ABSTRACT 30783

EC 03 0783 ED N.A.
Publ. Date 68 11p.
Epstein, Lynn Chaikin And Others
Correlation of Dextroamphetamine Excretion and Drug Response in Hyperkinetic Children.
Johns Hopkins University, Baltimore, Maryland
Public Health Service (DHEW), Washington, D. C.
EDRS not available
Journal Of Nervous And Mental Disease; V146 N2 P136-46 Feb 1966

Descriptors: exceptional child research; hyperactivity; neurologically handicapped; drug therapy; medical research; behavior change; medical treatment; dextroamphetamine

The study investigated the interaction between the response to dextroamphetamine and the ascribed cause of hyperkinesis, and characterized the patterns of drug excretion in hyperkinetic children. Ten hyperactive subjects (ages 5.75 to 9.5 years), were divided into organic (likely physical damage to CNS) and nonorganic groups. Subjects served as their own controls, half receiving a placebo first and half the amphetamine first. Pre-drug and on-drug measures were made, and urine samples analyzed for amphetamine content. Tables report detailed results of measures. In general, the physiological variables of blood pressure, pulse, respiration, and weight did not change for either group after drug administration, but fine motor coordination improved for both groups. No significant change in the critical flicker fusion frequency occurred for either group. Proteus maze test quotient improved for both groups (significantly greater for the organic group). The organic group tolerated higher doses of dextroamphetamine, perhaps because of higher and more rapid excretion. Parental and psychiatric subjective evaluations rated all of the organic group greatly improved in hyperkinetic behavior, while three of the nonorganic group did not seem to be improved in behavior. (KW)

ABSTRACT 30812

EC 03 0812 ED N.A.
Publ. Date 65 178p.
Carter, Charles H.; Gustafson, Sarah R.
Drugs in Neurospastic Disorders.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($8.00).

Descriptors: exceptional child research; cerebral palsy; neurologically handicapped; drug therapy; medical treatment; medical evaluation; neurology; physiology; medical research; spasticity

The analysis of the use of drugs in neurospastic disorders contains documented information on the efficacy of many specific drugs. The problem of spasticity in the brain-damaged patient is first reviewed, and the neurophysiological basis of spasticity covered. The classification, etiology, and diagnosis of cerebral palsy are outlined. The largest section of the text, the Role of Drugs in the Therapy of Cerebral Palsy, examines pharmacology, local and centrally-acting skeletal muscle relaxants, clinical experience and studies, and tranquilizers as used in the treatment of spastic disorders. The quantification of hypertonias is also outlined. (KW)

ABSTRACT 30894

EC 03 0894 ED N.A.
Publ. Date 69 5p.
Comly, Hunter H.
Drugs for Emotionally Disturbed Children.
EDRS not available
Children's House; V3 N2 P6-10 Spr 1969

Descriptors: exceptional child research; emotionally disturbed; drug therapy; epilepsy; hyperactivity; historical reviews; medical treatment

The use of drugs for emotionally disturbed children is discussed (part one of a two part series). A general description and review of drug usage and the importance of its role in treatment are the focal points of the article. (CD)

ABSTRACT 30895

EC 03 0895 ED N.A.
Publ. Date 69 4p.
Comly, Hunter H.
Drugs for Emotionally Disturbed Children. Part II.
EDRS not available
Children's House; V3 N3 P10-13 Sum 1969

Descriptors: exceptional child research; emotionally disturbed; hyperactivity; case studies (education); drug therapy; teacher role; parent counseling; class management; medical treatment

In the second of a two part series on drugs for emotionally disturbed children, the author presents a case study on hyperactivity to illustrate one of today's uses of drugs in treatment of disturbed children. The author stresses the importance of professional medical guidance (diagnosis and evaluation), parent and teacher understanding, and appropriate alterations in school curriculum, scheduling, and medication. (CD)

ABSTRACT 30918

EC 03 0918 ED N.A.
Publ. Date Dec 70 11p.
Zedler, Empress Y.
Educating Programming for Pupils with Neurologically Based Language Disorders.
EDRS not available
Journal Of Learning Disabilities; V3 N12 P618-28 Dec 1970

Descriptors: exceptional child research; learning disabilities; program planning; language handicapped; neurological defects; regular class placement; drug therapy; educational planning

Fifty matched pairs of otherwise normal, underachieving pupils with neurologically based language-learning disorders were divided into experimental and control groups. Experimental subjects remained in regular classes in school and received individualized teaching outside of school hours from specially trained clinicians. Control subjects were enrolled in special education classes and did not receive clinical teaching after school. Half of the experimental and half of the control subjects had anticonvulsive medication prescribed by their physicians. The groups were pre- and post-tested for changes in academic achievement and mental functioning. Experimental groups made significantly greater gains in both variables than did the control groups. Medicated groups did not make greater gains when compared with unmedicated groups. Implications are that schools should refrain from referring such children to special education classes, and that they should leave them in regular classes and provide them with individualized supplementary teaching outside of regular school hours. (Author)

ABSTRACT 30954

EC 03 0954 ED N.A.
Publ. Date Nov 70 19p.
Park, Lee C.; Imboden, John B.

Clinical and Heuristic Value of Clinical Drug Research.
EDRS not available
Journal Of Nervous And Mental Disease; V151 N5 P322-40 Nov 1970

Descriptors: exceptional child research; emotionally disturbed; research reviews (publications); drug therapy; psychopathology; methodology; clinical diagnosis

In order to examine carefully the factors involved in the problem of a gulf between drug research and clinical application of the findings, the authors have exhaustively reviewed the methodology and findings of controlled clinical psychopharmacological research. In presenting their analysis of the literature, they have detailed findings of practical use for the clinician, divided according to the psychopharmacologists' categories of drug factors and nondrug factors. The authors feel that as far as practical applicability is concerned, clinical drug research has not added very much to what has been learned through clinical experience. On the other hand, the heuristic value of drug research has been great in terms of opening new approaches to understanding and influencing mental functioning and psychopathology, and in the development of research methodology for the behavioral sciences. The authors discuss the terms nondrug and nonspecific factors, which are frequently used by psychopharmacologists to cover in blanket fashion various critical psychotherapeutic factors in patient improvement not particularly valued by their theoretical approach. The authors point out that this narrow view has prevented adequate study of simultaneous psychotherapy and pharmacotherapy and has been reflected in the lack of applicability of research findings for the practitioner. Psychotherapy variables relating to drug therapy are discussed. At the conclusion of the paper, the authors give general guidelines for the clinical use of psychotropic drugs, based on integration of current research and clinical knowledge. (Author/CD)

ABSTRACT 30959

EC 03 0959 ED N.A.
Publ. Date Oct 69 7p.
Jacobson, Edward J. And Others
Clinical Findings in High-Frequency Thresholds During Known Ototoxic Drug Usage.
EDRS not available
Journal Of Auditory Research; V9 N4 P379-85 Oct 1969

Descriptors: exceptional child research; special health problems; audiometry; audiometric tests; auditory tests; medical treatment; drug therapy

To determine the effect of ototoxic drugs on high-frequency hearing, seven patients (undergoing treatment for tuberculosis) were studied. High-frequency audiometry (to 18 kc/s) revealed marked hearing level changes in four patients which were detected 41 to 76 days before their detection with conventional audiometry. Two patients showed minimal changes, and one patient evidenced no change in hearing. The researchers felt additional inquiry into the clinical significance of high-frequency audiometry should be made. (CD)

ABSTRACT 30976

EC 03 0976 ED N.A.
Publ. Date 66 234p
Livingston, Samuel
Drug Therapy for Epilepsy.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($9.50).

Descriptors: exceptional child research; epilepsy; drug therapy; medical treatment; medical evaluation; seizures; chemistry; metabolism; prevention; hypoglycemia

The book is intended to acquaint the practicing physician with the indications for usage, dosages, and untoward reactions of all the anticonvulsant drugs being used in the treatment of epilepsy. Twenty drugs currently being employed for epilepsy are examined in detail, as are other drugs primarily employed as tranquilizing agents, and four experimental drugs. The analysis of each drug includes discussion on chemical composition, brief history of use, metabolism, how it is supplied, indications for usage, dosage, and untoward reactions, and a bibliography. Discussed in the second chapter are general measures to prevent and detect untoward reactions of anticonvulsant drugs, and, in detail, 22 specific reactions and methods for their detection and management. The third chapter deals with the diagnosis and treatment of hypoglycemia, following the author's prefatory remarks on the diagnostic problem of differentiating hypoglycemic convulsions from epileptic seizures. (KW)

ABSTRACT 31029

EC 03 1029 ED N.A.
Publ. Date Dec 66 7p.
Knobel, Mauricio And Others
Pharmacological Treatment of Behavior Disorders in Children.
EDRS not available
International Journal Of Neuropsychiatry; V2 N6 P660-6 Dec 1966

Descriptors: exceptional child research; emotionally disturbed; drug therapy; attitudes; parent attitudes; negative attitudes; medical treatment; medical research; psychophysiology; behavior change

A psychopharmacological study was conducted to determine the effects of attitude toward medication of the child and the parents, where a known active product such as the para-acetamidobenzoic acid salt of 2-dimethylaminoethanol is used in behavior disorders of children. Subjects were 52 children, aged 3-12 years, who had either neurotic, psychotic, or severe behavioral problems. Attitudes of mothers and of the patients over 6 years of age were determined by a questionnaire to be positive (placebo attitudes), negative (anti-drug), or neutral. A double-blind technique plus environmental changes, in regard to the milieu where the medication was given, was used. Any behavior improvement was noted by interview with play technique, direct patient questioning and information from mothers or teachers. It was found that a placebo-attitude favored positive therapeutic results, while an anti-drug attitude hindered positive results. More significant correlation existed between attitude and drug than among the other possible alternatives. (KW)

ABSTRACT 31042

EC 03 1042 ED N.A.
Publ. Date Dec 68 14p.
Epstein, Estelle P. And Others
Chemotherapy and the Hyperkinetic Child.
EDRS not available
Journal Of Education; V151 N2 P47-60 Dec 1968

Descriptors: exceptional child research; emotionally disturbed; hyperactivity; drug therapy; teacher role

To gather information concerning the utilization of drugs specifically with hyperkinetic children, an investigation was made of the current practices utilizing the various amphetamines, the most common drugs used, and persons dealing directly with such children. The concern of the investigation was the problem facing a classroom teacher when confronted with a hyperkinetic child, and ways in which to promote better understanding of the situation. From the information received, assumptions were drawn and recommendations for teachers were made. (CD)

ABSTRACT 31290

EC 03 1290 ED N.A.
Publ. Date 70
Niedermeyer, E., Ed.
Modern Problems of Pharmacopsychiatry. Volume 4, Epilepsy: Recent Views on Theory, Diagnosis, and Therapy of Epilepsy.
EDRS not available
Albert J. Phiebig, Inc., P. O. Box 352, White Plains, New York 10602 ($20.90).

Descriptors: epilepsy; drug therapy; neurological defects; etiology; biochemistry; physiology; medical treatment; medical research; seizures

One of a series dealing with neuro-psychopharmacological subjects, the book contains 19 papers on facets of the theory, diagnosis, and therapy of epilepsy. The chemistry and electrophysiology of the abnormal cellular response, and pharmacological aspects of anti-convulsive therapy are especially emphasized. Covered are such topics as cellular pathophysiology, electro-encephalography, neuropathology of epilepsy, genetic factors, grand mal and petit mal epilepsy, seizure discharges, psychiatric aspects of

temporal lobe epilepsy, withdrawal seizures following chronic sedative intoxication, role of alcohol in seizure production, principles of drug therapy, the benzodiazepines and other anticonvulsants, neurosurgical treatment, and rehabilitation and employability problems. (KW)

ABSTRACT 31405

EC 03 1405 ED N.A.
Publ. Date 71 500p.
Himwich, Harold E., Ed.
Biochemistry, Schizophrenias, and Affective Illnesses.
EDRS not available
Williams And Wilkins Company, 428 East Preston Street, Baltimore, Maryland 21202 ($18.75).

Descriptors: exceptional child research; psychosis; emotionally disturbed; schizophrenia; medical research; biological influences; drug therapy; chemistry; biochemistry

The book offers a representative exposition of current research and hypotheses, written by men who are advocates of the hypotheses or contributors to the research, of the biochemistry of mental illness. Areas such as the forms of schizophrenia and their biological correlates; catecholamine metabolism and affective illness; steroid metabolism in schizophrenia, depression, and mania; and localization and neural control of brain monamines are researched and discussed. (CD)

ABSTRACT 31492

EC 03 1492 ED N.A.
Publ. Date Jan 71 8p.
Barcai, Avner
Predicting the Response of Children with Learning Disabilities and Behavior Problems to Dextroamphetamine Sulfate.
EDRS not available
Pediatrics; V47 N1 P73-80 Jan 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; behavior problems; drug therapy; medical research; behavior change; medical treatment; predictive validity; amphetamines; dextroamphetamine sulfate

The clinical study used a phenomenological, office practice approach to diagnose the hyperkinetic child who responds with improved concentration and organization of his mental facilities to the amphetamines. The combination of anamnestic items, information from the teacher, and the clinical interview were found to be effective in correctly predicting approximately 85% of behaviorally disturbed children who would respond favorably to the stimulating drugs. The finger twitch test and a list of selected questions, which could be used by the pediatrician in his office, were found to lead to a weighted, non-inferential assessment of the child's mental status, as a help in determining the advisability of prescribing the stimulant for some behaviorally disturbed children. (Author)

ABSTRACT 32097

EC 03 2097 ED N.A.
Publ. Date 70 814p.
Clark, William G., Ed.; Del Giudice, Joseph, Ed.
Principles of Psychopharmacology.
EDRS not available
Academic Press, Inc., 111 Fifth Avenue, New York, New York 10003 ($19.50).

Descriptors: medical research; drug therapy; drug abuse; psychophysiology; metabolism; biochemistry; physiology; research reviews (publications); research utilization; reference books; psychopharmacology

The document is a textbook for physicians, medical students, and behavioral scientists that deals with the principles of psychopharmacology. Following an introductory section with a brief historical review, such topics as basic anatomical and physiological considerations, biochemistry of mental disease and some effects of psychotropic drugs, structure and metabolism of psychotropic drugs, the pharmacologic basis of psychopharmaco-therapy, genetic and environmental aspects of drugs and behavior, psychopharmacologic drug study design and research problems with humans, drug abuse and related problems and clinical use of psychotherapeutic drugs are discussed. Extensive appendixes provide further suggested readings, general references, and other bibliographic material. (CD)

ABSTRACT 32477

EC 03 2477 ED N.A.
Publ. Date 70 288p.
Smith, W. Lynn, Ed.
Drugs and Cerebral Function.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($17.25).
Proceedings of the First Cerebral Function Symposium (Aspen, Colorado, June 7-9, 1969).

Descriptors: drug therapy; neurology; psychophysiology; medical research; medical treatment; biochemistry; emotionally disturbed; learning disabilities; conference reports

Twenty-one papers treat various aspects of relationships between brain behavior and the biochemistry and physiology of central nervous system acting drugs and, by doing so, illustrate how chemically induced therapeutic behavioral change can be observed as a direct result of alteration in cerebral function. Following an initial section examining anatomical areas of the brain, the remaining papers treat specific drugs directly affecting cerebral functions and behavior. Four categories of drugs are examined: psychoactive drugs, learning facilitators (drugs which have an effect on the formation of engrams), biochemicals, and vasodilators (as an example of drugs which may directly influence a body system). Papers reflect recent developments in drugs and behavior in each area, particularly in terms of assessing correlates of brain function and behavior. (KW)

ABSTRACT 32488

EC 03 2488 ED N.A.
Publ. Date Jun 71 7p.
Oettinger, Leon, Jr.
Learning Disorders, Hyperkinesis and the Use of Drugs in Children.
EDRS not available
Rehabilitation Literature; V32 N6 P162-7, 170 Jun 1971

Descriptors: exceptional child education; hyperactivity; drug therapy; learning disabilities; sedatives; diagnostic tests

The use of drugs to treat hyperactivity and learning disorders in children is discussed. The questions of misuse and abuse of stimulant drugs are scrutinized, and a defense of drug treatment as a normalizing agent for hyperactivity is given. Diagnostic evaluation of the patient before prescribed drug treatment, from physical check through psychological, intelligence, tactile perception, and dominance testing, is covered. The stress throughout the article is that drug treatment be thought of as preparation in which the functioning of the mind as a unit is improved so that it can then respond in a more nearly normal pattern. (CD)

ABSTRACT 32595

EC 03 2595 ED N.A.
Publ. Date 71 16p.
Ritvo, Edward R. and Others
Effects of L-dopa in Autism.
EDRS not available
Journal of Autism and Childhood Schizophrenia; V1 N2 P190-205 Apr-Jun 1971

Descriptors: exceptional child research; emotionally disturbed; autism; drug therapy; medical research; L-dopa

A study was designed to determine if blood serotonin concentrations could be lowered in autistic children by the administration of L-dopa and, if so, to observe possible clinical or physiological changes. Following a 17-day placebo period, four hospitalized autistic boys (3, 4, 9, and 13 years of age) received L-dopa for 6 months. Results indicated a significant decrease of blood serotonin concentrations in the three youngest patients, a significant increase in platelet counts in the youngest patient, and a similar trend in others. Urinary excretion of 5HIAA decreased significantly in the 4-year-old patient and a similar trend was noted in others. No changes were observed in the clinical course of the disorder, the amount of motility disturbances (hand-flapping), percent of REM sleep time, or in measures of endocrine function (FSH and LH). Possible mechanisms by which L-dopa lowered blood serotonin concentrations, increased platelet counts, and yet failed to produce other changes are discussed. (Author)

ABSTRACT 32612

EC 03 2612 ED 051 612
Publ. Date 71 8p.
Report of the Conference on the Use of Stimulant Drugs in the Treatment of

Behaviorally Disturbed Young School Children (Washington, D.C., January 11-12, 1971).
Department of Health, Education and Welfare, Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child services; behavior problems; hyperactivity; drug therapy; drug abuse; conference reports

The advisory report for professionals and the public concerns the use of stimulant medications in treating elementary school-age children with behavioral disturbances. The discussion of the nature of children's behavioral disorders focuses upon hyperactivity, often termed minimal brain dysfunction or hyperkinetic behavioral disturbance, which is often treated with stimulant drugs. Incidence, causes, course, and diagnosis of hyperkinetic disorders are summarized, and drug treatment and its degree of success reviewed. Concerns voiced by the public and the media about hazards and abuses when stimulant medications are used for children are discussed and some misconceptions clarified. It is concluded that stimulant drugs are a valid method of treatment in hyperkinetic behavioral disorders, but not the only effective form of treatment. Expanded programs of continuing education and research are recommended. (KW)

ABSTRACT 32722

EC 03 2722 ED 052 563
Publ. Date 71 366p.
Tarnopol, Lester, Ed.
Learning Disorders in Children: Diagnosis, Medication, Education.
EDRS not available
Little, Brown and Company, 34 Beacon Street, Boston, Massachusetts 02106.

Descriptors: exceptional child research; learning disabilities; medical treatment; medical evaluation; neurological defects; drug therapy; psychological evaluation

Nine papers dealing with educational, psychological, and medical aspects of the management of children with learning disabilities focus upon the medically-related aspects and information which would be useful to a multidisciplinary team in coordinating differential diagnostic efforts and instituting remediation programs. Discussions of the relationship between learning problems and neurological dysfunction, diagnosis and medical management using medication, and the relationship of medical management to educational procedures are aimed primarily at physicians. Following an introductory paper on neurogenic learning disorders, two case histories (including evaluations based on diagnostic tests and recommendations for remediation) are presented. Other papers treat medical responsibilities, the use of drugs in diagnosis and treatment, the neurology of learning disabilities, psychological diagnosis and remediation in relation to brain damage and learning disabilities, and the clinical pharmacology of psychotropic drugs with special reference to children. Also included are the proceedings of a panel of physicians and psychologists discussing management via medication. (KW)

ABSTRACT 32799

EC 03 2799 ED N.A.
Publ. Date Jun 71 9p.
Ladd, Edward T.
Disciplinary Principles and Behavior Changing Drugs.
EDRS not available
Inequality in Education; N8 P2-10 Jun 1971

Descriptors: exceptional child education; hyperactivity; behavior problems; drug therapy; discipline problems; teacher role

The attitudes of educators toward the control of disruptive behavior by medication are discussed. Rationales frequently offered for the use of drugs are examined and in many cases considered invalid. Attention is given to ways in which tranquilizers, barbituates, and central nervous system stimulants affect children and to reasons why school personnel should refrain from trying to have children placed on drugs. Conclusions are that the proper use of drugs is medical, not disciplinary, and that educators should recommend children suspected of having medical problems to a physician or psychologist, but should avoid suggesting a particular diagnosis or treatment. (RJ)

ABSTRACT 32802

EC 03 2802 ED N.A.
Publ. Date Jun 71 6p.
Ireland, Roderick L.; Dimond, Paul R.
Drugs and Hyperactivity: Process Is Due.
EDRS not available
Inequality in Education; N8 P19-24 Jun 1971

Descriptors: exceptional child education; hyperactivity; behavior problems; drug therapy; legal problems; court cases

Factors are explored which must be considered when challenging the use of drugs for hyperactive school children by law suits. Medical evidence concerning behavior problems is considered as are the following three constitutional problems which arise: procedural due process, family power and personal autonomy, and equal protection. Each issue is discussed and illustrated by court cases. The assumption of the article is that the only issue facing a lawyer is a controvery--a client who refuses (or is contemplating refusing) to take drugs, and a school system which denies him admission unless he does so. The conclusion reached is that the courts, doctors, and school personnel must proceed cautiously and conservatively in this area. (RJ)

ABSTRACT 32951

EC 03 2951 ED N.A.
Publ. Date Aug 71 8p.
Claghorn, J. and Others
The Effect of Drugs on Hyperactivity in Children with Some Observations of Changes in Mineral Metabolism.
EDRS not available
Journal of Nervous and Mental Disease; V153 N2 P118-25 Aug 1971

Descriptors: exceptional child research; drug therapy; hyperactivity; metabolism; learning disabilities; biochemistry

Twenty-three hyperactive children in a state school for the mentally handicapped were used as subjects to test out the hypothesis that acetazolamide would reduce hyperactive behavior. For comparison, amphetamine, a commonly used drug in this indication, placebo, and no treatment were used. Activity was measured using a room equipped with monitored toys and sonic sensors as well as global and ward behavior rating scales. Measures of serum and red cell electrolytes were performed. Acetazolamide was found to reduce serum and red cell potassium. No other electrolyte effects were found with any drug. Of the four treatment conditions, acetazolamide and placebo were felt to improve hyperactivity; acetazolamide was statistically superior. The theoretical significance of this finding is not clear, as this drug is known to have many pharmacological actions. Large amounts of the drug enter the cerebrospinal fluid (CSF) and may directly affect neurons; CSF production is reduced and potassium levels are altered; carbonic anhydrase inhibition occurs. Any one of these actions might be relevant, or for that matter, combinations of these effects may, it is felt, account for the undisputable reduction in hyperactivity noted in this short trial. (Author)

ABSTRACT 32983

EC 03 2983 ED N.A.
Publ. Date Jun 71 13p.
Campbell, Susan B. and Others
Cognitive Styles in Hyperactive Children and the Effect of Methylphenidate.
EDRS not available
Journal of Child Psychology and Psychiatry; V12 N1 P55-67 Jun 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; cognitive development; cognitive processes; drug therapy; academic achievement; behavior change

Cognitive problems of hyperactive children and effects of energizing drugs on their cognitive performance were studied. Data suggested that hyperactive children usually employed less efficient problem solving strategies than normal children, which may have explained their poor academic achievement. Hyperactive children whose behavior was modified by methylphenidate seemed to solve problems more efficiently and carefully; academic achievement, classroom behavior, and cognitive abilities may have improved due to increased attention, response organization, and impulse control. (CB)

ABSTRACT 32984

EC 03 2984 ED N.A.
Publ. Date 71 11p.
Cott, Allan
Orthomolecular Approach to the Treatment of Learning Disabilities.
EDRS not available
Schizophrenia; V3 N2 P95-105 Second Quarter 1971

Descriptors: exceptional child research;

learning disabilities; emotionally disturbed; hyperactivity; drug therapy; nutrition; schizophrenia; medical treatment; orthomolecular therapy; megavitamin therapy

Orthomolecular therapy for learning disabled children is discussed. On the hypothesis that the hyperactive, learning disabled child may actually have a biochemical or neurological disorder, the author has treated 500 emotionally disturbed and learning disabled children from 1966 to 1971. His successful treatment of using megavitamin therapy to provide optimum molecular brain composition, especially optimum concentration of substances normally present in the human body, is briefly discussed. Main vitamins successfully used to control hyperactivity, ritualism, and seizures are niacin or niacinamide, ascorbic acid, pyridoxine, and calcium pantothenate. Advocating more studies relating advances in nutritional sciences to medicine, the author suggests that hyperactivity in the genetically predisposed child may be an early symptom of schizophrenia and may be made manifest by ingestion of cereal grains and their products. (CB)

ABSTRACT 32985

EC 03 2985 ED N.A.
Publ. Date 71 7p.
Hoffer, A.
Vitamin B3 Dependent Child.
EDRS not available
Schizophrenia; V3 N2 P107-13 Second Quarter 1971

Descriptors: exceptional child research; emotionally disturbed; schizophrenia; hyperactivity; drug therapy; medical treatment; medical research; orthomolecular therapy; pellagra; megavitamin therapy

A vitamin B3 responsive syndrome in children, characterized by hyperactivity, deteriorating performance in school, perceptual changes, and inability to acquire or maintain social relationships, was discussed. In an experiment to see if emotionally disturbed children could be classified by their responses to megadoses of vitamin B3, 33 emotionally disturbed children were given megavitamin therapy, a main aspect of orthomolecular therapy. The successful responses of 32 children were discussed, followed by discussion of two families having two-generation transmission of vitamin B3 dependency, in which megavitamin therapy was also successful. Successful treatment meant that subjects were free of symptoms and signs, were performing well in school, and were getting on well with families and community. Pellagra's similarities to schizophrenia were also discussed. (CB)

ABSTRACT 32986

EC 03 2986 ED N.A.
Publ. Date 71 13p.
Ban, Thomas A.
Current Status of Chemotherapy of Schizophrenia.
EDRS not available
Schizophrenia; V3 N2 P116-28 Second Quarter 1971

Descriptors: emotionally disturbed; schizophrenia; drug therapy; biochemistry; medical treatment; research reviews (publications); neuroleptics

The current status of chemotherapy of schizophrenia, with particular reference to neuroleptic and niacin treatment, is appraised. Although limitations are taken into account, an effective treatment for schizophrenia is pharmacotherapy with neuroleptics. The recognition that neuroleptics help, but do not cure, the schizophrenic patient, leads to an increasing interest in the testing of hypotheses based on biochemical theories. There are at least five biochemical hypotheses on the basis of which the administration of nicotinic acid may have a therapeutic effect in schizophrenia patients: presence of adrenochrome in the serum, presence of mauve factor, pink spot, bufotenin-like substance in the urine, and presence of transmethylation disturbance. Prescription of nicotinic acid is not advised before neuroleptic treatment is tried, however. (Author/CB)

ABSTRACT 33135

EC 03 3135 ED N.A.
Publ. Date Aug 71 11p.
Sykes, Donald H. and Others
Attention in Hyperactive Children and the Effect of Methylphenidate (Ritalin).
EDRS not available
Journal of Child Psychology and Psychiatry; V12 N2 P129-39 Aug 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; attention span; drug therapy; motor reactions; methylphenidate

The study examined the performance of 40 hyperactive children relative to that of 19 controls (matched for age, sex, and IQ) on a task susceptible to momentary lapses of attention; examined the motor restlessness of both groups while seated during the attention task, using a stabilimetric cushion after the design of Sprague and Toppe (1966); and investigated the effect of methylphenidate (ritalin), a central nervous system stimulant, on attention in the hyperactive children. It was found that the maintenance of attention to an experimenter-paced task requiring the detection of significant stimuli was impaired in the hyperactive subjects; they detected fewer of the significant stimuli and made more incorrect responses to non-significant stimuli. Presence or absence of an auditory distractor had no effect on either group. Motor restlessness of the hyperactive children was significantly greater, and while restlessness increased during the second session for both groups, it increased at a faster rate for the hyperactive group. Hyperactive children treated with methylphenidate (ritalin) improved significantly in all areas of performance as compared to hyperactive children given a placebo. (KW)

ABSTRACT 33249

EC 03 3249 ED N.A.
Publ. Date 71 5p.
Court, J. H.
Psychological Monitoring of Interventions into Educational Problems with Psychoactive Drugs.
EDRS not available
Journal of Learning Disabilities; V4 N7 P359-63 Aug-Sep 1971

Descriptors: exceptional child services; learning disabilities; behavior problems; drug therapy; evaluation methods; reactive behavior; psychomotor skills

Discussed are the importance of evaluative measurement and feedback on effectiveness of therapy in situations where drugs are being used to modify behavior disorders associated with cerebral dysfunction in children and improve learning facility. Techniques of psychological testing involving psychomotor measures are reported which offer sensitive means of monitoring the relative effects of medication. Their quantitative nature allows clinical decisions to be made quickly and objectively. Two illustrative cases are presented, in which stimulant drugs were associated with both educational and behavioral improvements. (Author/KW)

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